Responding to the imperatives of learning for the 21st Century

In the face of a flurry of amorphous and often exaggerated rhetoric on the topic of learning in the 21st Century, educators are well advised to decide upon a handful of powerful generative ideas and to work within the "zone of proximal development" of our institutions, teachers and students to implement them. This requires negotiating a coherent, clearly understood and credible set of benchmarks for each of our priorities and by identifying where we are (individually and collectively) along each continuum and setting realistic targets for our growth.

As we see it, the core challenges and powerful generative ideas at the heart of learning in the 21st Century are to thoughtfully build an educational system that supports students and teachers in "engaged, self-regulated, C_3 inquiry within a digital environment."

I. Levels of educational engagement: the extent to which teachers and students are personally committed to pursuing the educational goals and successfully performing their ongoing teaching and learning tasks.

Not engaged	Level I	Level II	Level III	Level IV	Level V
Non-compliance: Students and teachers regularly do not complete assigned tasks	**Merely complies:** Students and teachers perform educational tasks largely because of external rewards or expectations	**Holds interest:** Students and teachers perform educational tasks to the extent that the tasks are enjoyable or pleasing	**Is valued:** Students and teachers perform educational tasks not solely for their interest but because they appreciate their importance, usefulness or personal	**Is challenging:** Students and teachers become caught up in their educational tasks because they present appropriate and meaningful challenges	**Transforms:** The effects and enthusiasm of students and teachers being excited or caught by their work extend to other aspects of their personal and professional lives

2. Degrees of self-regulated learning/teaching: the extent to which teachers and students are empowered to carry out their roles in personally responsible, self-reflective ways and to exercise reasoned judgment in the pursuit of agreed-upon educational goals.

Not self-regulated	Level I	Level II	Level III
Passive followers of instructions: Teachers and students depend on others for almost all decisions about what, how and when they teach/learn; their job is to faithfully follow explicit procedures, and to be held accountable to externally applied standards	**Preferences within limited options:** Teachers and students believe they have some latitude and responsibility to take charge of what, how and when they teach/learn but that it limited to a narrow array of preferences within authorized methods/ opportunities; they are held accountable largely to externally applied standards	**Unsupported opportunities for discretion:** Teachers and students understand the expectations on them to exercise thoughtfully informed judgments in the pursuit of agreed-upon targets and to assess their own performances but are often disempowered by a lack of knowledge, skill and meaningful support	**Substantial supported discretion within negotiated educational targets:** Teachers and students are actively supported in thoughtfully clarifying and regulating their teaching/learning in pursuit of consensual goal, and are inclined and competent to accurately monitor their performance in light of agreed-upon standards

3. Degrees of embedded critical, creative and collaborative inquiry: the extent to which teaching and learning is a matter of working with the support of others to draw well-informed and often imaginative conclusions using the subject matter of the curriculum.

Not inquiry based	Level I	Level II	Level III
Largely transmission and research: Infrequent invitations for students to think critically; largely fact-based learning delivered by the teacher or through print and digital resources; limited opportunities for creativity; students may work together but don't think together	**Large project inquiry:** Invitations to think critically occur largely at the end of an extended period of instruction; considerable fact-based learning delivered by the teacher or through print and digital resources; creativity and collaborative thinking are expected but not taught	**Frequent mini-inquiries with tool support:** Supported invitations to think critically, creatively and collaboratively are regularly inserted within and at the end of periods of instruction	**Ubiquitous, scaffolded inquiry and tool development:** Thinking critically, creatively, collaboratively within robust learning communities is richly supported and seamlessly embedded as the method of teaching and learning

4. Levels of functional literacy within digital environments: the extent to which teachers and students understand the dynamics of the digital era in the world around them and can make effective use of various teaching and learning technologies in pursuit of their educational goals.

4.1 Understanding of digital communications

Misunderstood	Level I	Level II	Level III
Misunderstands digital communications: Has very little understanding of, and perhaps is even alienated from, the functioning of digital communication systems and their influences in their lives and beyond	**General awareness:** Has a general overview of the role and influence of some digital communication systems, may be baffled or perplexed by some aspects	**Some in-depth understanding:** Understands key aspects of the role, influence and workings of major digital communication systems in their lives and beyond	**Extensive critical understanding:** Understands and critically analyzes the history, science, sociology, psychology and art of a range of digital communication systems, technologies and developments, particularly those related to social media.

4.2 Fluency with teaching and learning technologies

Non-fluent use	Level I	Level II	Level III
Low awareness, poor application: Teachers and/or students are largely unaware of the relative strengths and weaknesses of various digital and non-digital technologies, and use without conscious consideration a narrow range of these in teaching/learning, often in minimally effective or inappropriate ways	**Narrow application, information transmission:** Teachers and/or students use a limited range of digital and non-digital technologies in generally effective ways, but often largely to deliver information	**Narrow, effective application:** Teachers and students deliberately select and effectively use a range of digital and non-digital technologies to enhance learning/teaching, but only modest use of technologies to support differentiation, consideration of multiple perspectives and integration of multi-modal resources	**Broad blended use to enhance teaching and learning:** Teachers and students thoughtfully choose and strategically use a rich blend of digital and non-digital technologies that effectively empower the acquisition, representation, manipulation and creation of ideas, using differentiated, multi-perspectival and multimodal resources